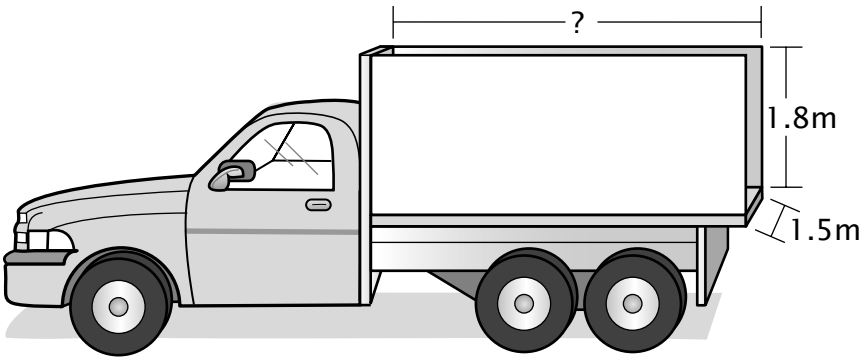
Missouri Assessment Program
Spring 2001

Mathematics

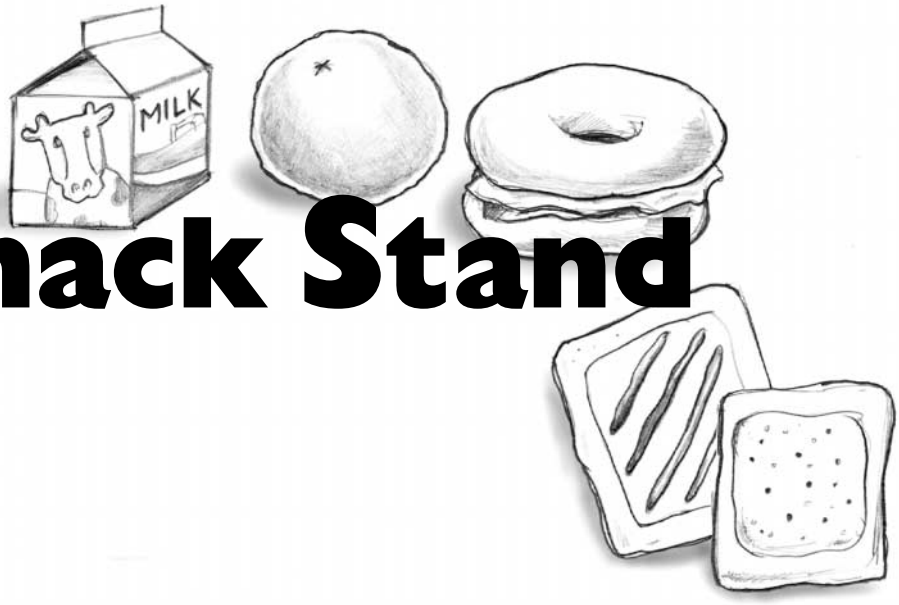
Released Items
Grade 8

9 Jeanelle's neighbor drives a truck like the one shown below.



The volume of the truck's storage space is 9.45 cubic meters. What is the length of the storage space? In the box below, write your answer and provide the work that shows how you arrived at your answer.

The Snack Stand



Directions

Do Number 1 about the snack stand. Show all of your work and write your answers directly in this book.

1 The Student Council Snack Stand sells refreshments at all sports and academic events held at Fulton Middle School. The total number sold of each item is listed per year in the table below.

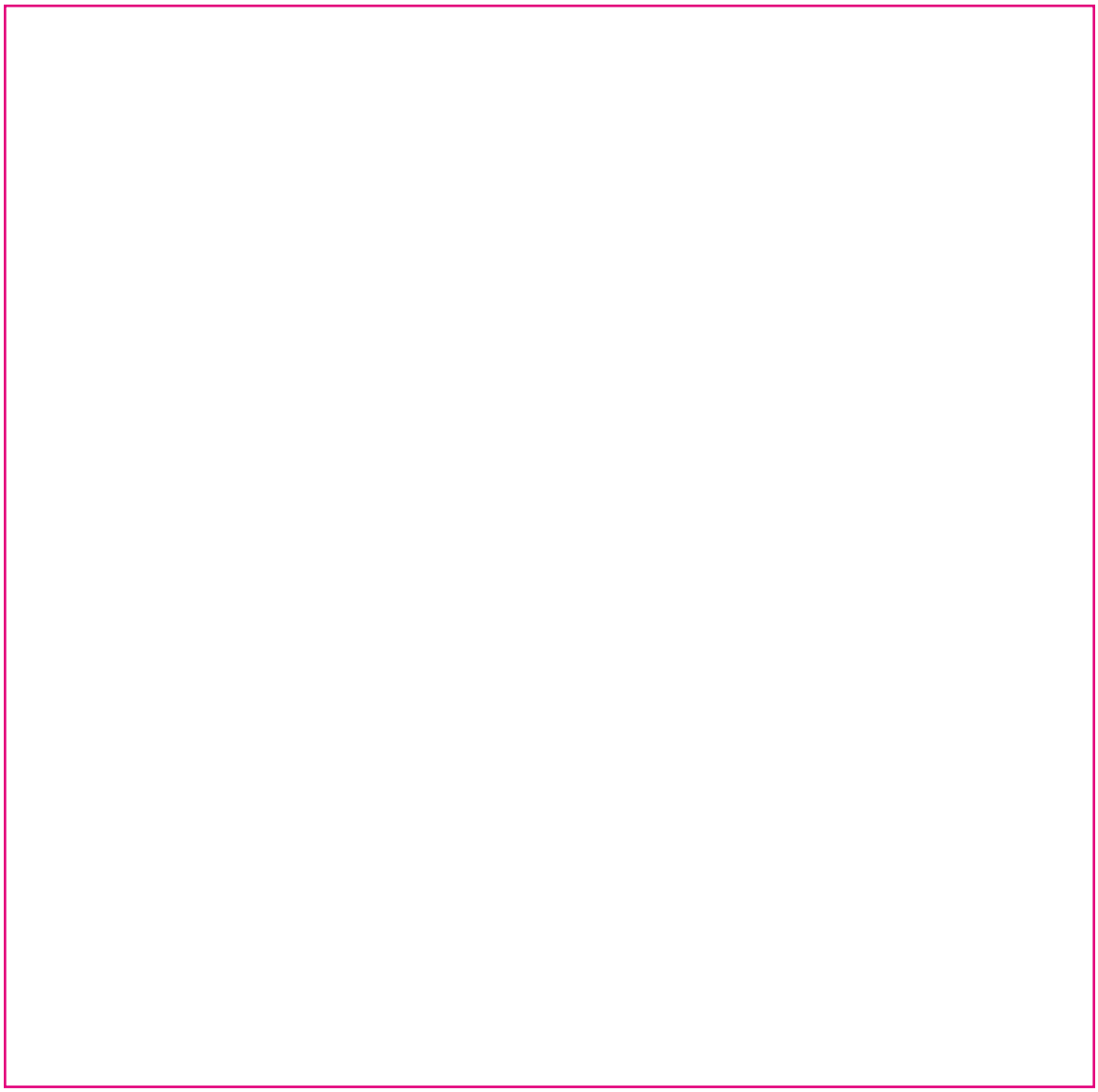
NUMBER OF ITEMS SOLD AT THE SNACK STAND

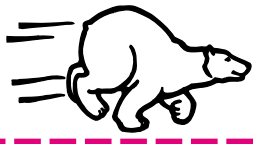
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Beverages	25	50	80	155	275	320
Snacks	75	115	130	165	185	210
Souvenirs	50	60	60	55	65	70

For the next school year, the student council has decided to eliminate one item due to limited storage space. The ***profits*** made on each sale of a particular item are as follows:

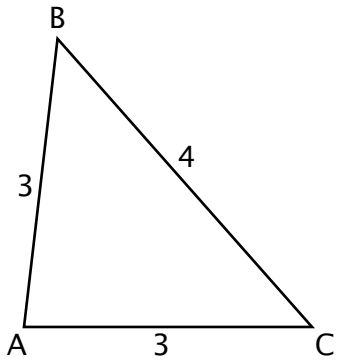
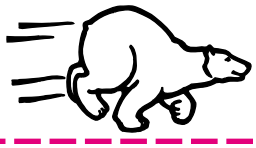
- beverages $0.50 each
- snacks $0.75 each
- souvenirs $2.50 each

Pat believes that beverages and snacks should be sold next year. On the other hand, Lee thinks beverages and souvenirs would be better choices. Give two written explanations that would support both Pat's and Lee's decisions. Be sure to use mathematics in ***both*** explanations that support each decision.





7 Look at the triangle below.



What is the smallest perimeter of a triangle that is ***similar*** to triangle ABC and has one side with length 12 ? In the box below, write your answer and explain in words or provide the work that shows how you arrived at your answer.